1. Mathematical Programming

3. Index Method. An approximation technique.

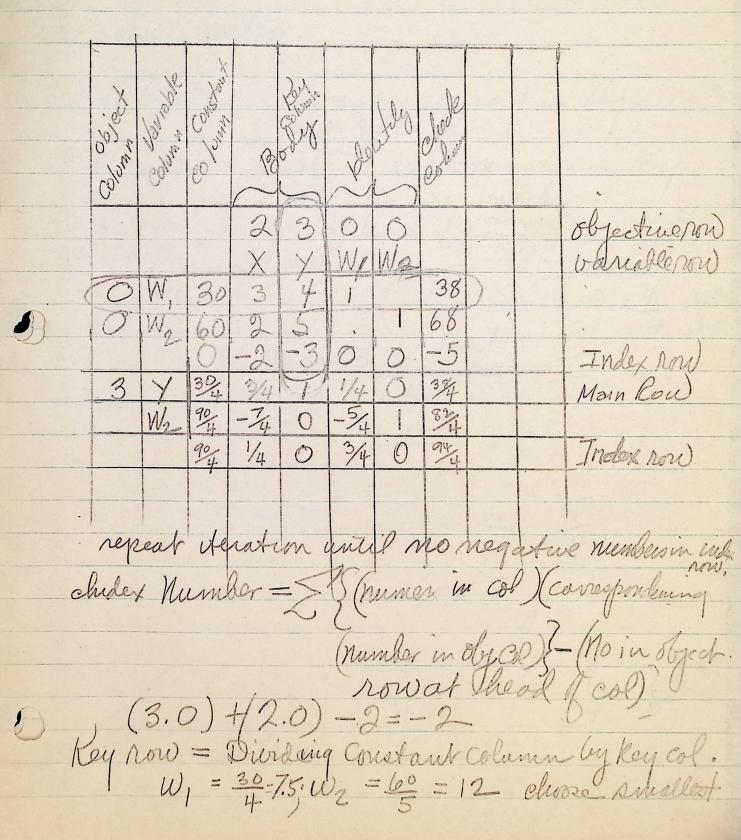
(1) Index Number: Mon Hours Required in any plant divided by Pleast man hours of any plant,

Operations Research Methods X Problem Sa sieni Wiley

Granoany 60

Linear Prodyamming
Factors in Identity and constants most be positive 3. Restrictions = $\{7x+6y \leq 84$ 7x+6y+w,=84b. Regovernonts = 5x+24=15 5x+24-W2+4=15 C. Approximation = {6× +54 = 50 6× +54 - 1/3 + 1/4 = 50 3 b 0 -1 0 -M-1

d. Equations (3x+44=100 3x+44+02=100



6 Jan 60 pm positive ratio. Rey Number: common element in hey now and

Rey Column

Main Row; plinde each number in Rey

Now by Rey Number:

Element in - Corresponding element in [corresponding corresponding to element in hew tableau new tableau

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The tableau number $= 2 - 3 \times 5 = -\frac{7}{4}$ $=5-4\times5=0$ $=0-1\times5=-5$ - 0 x 5 = 1 $= 68 - \frac{38 \times 5}{4} = 68 - \frac{190}{4} = \frac{82}{4}$ =0 $\frac{30(-3)}{4}$ $\frac{90}{4}$

6 January 60 Variations on Simpley Problem

Idle time process I cost # /2

Idle time process 11 Cost # 1 Object 10 W Modify 2 1/3/2/1 2×+34-50,-02=min. moxumen no of pieces X+y=Max objective aon 1100 another requirement X = 4 X + W3 = 4 would weake it disappear, Minimise idle time W, + les becomes - W, - Wz